
PRI operations guide

Primary Rate Interface (PRI) provides a digital connection from the Meridian 1 system to another Meridian 1 and to Central Office equipment (DMS-100 or AT&T 4ESS and 5ESS).

The Primary Rate Interface (PRI) circuit card, the QPC720, provides 24 channels to PRI equipment. Voice and data are transmitted over B-channels. Call control is supported out-of-band over a D-channel.

The B-channel is the fundamental channel in PRI. It carries user information to the far end, by means of T1 transmission, without carrying any signaling messages.

The D-channel transmits the standard signaling protocol, carrying the call set-up and feature activation information to the destination.

Each D-channel is physically connected to a QPC757 or NT6D11AB D-channel Interface (DCHI) card, or a NT6D80 Multi-purpose Serial Data Link (MSDL) card. The MSDL and DCHI cards provides the PRI link capability.

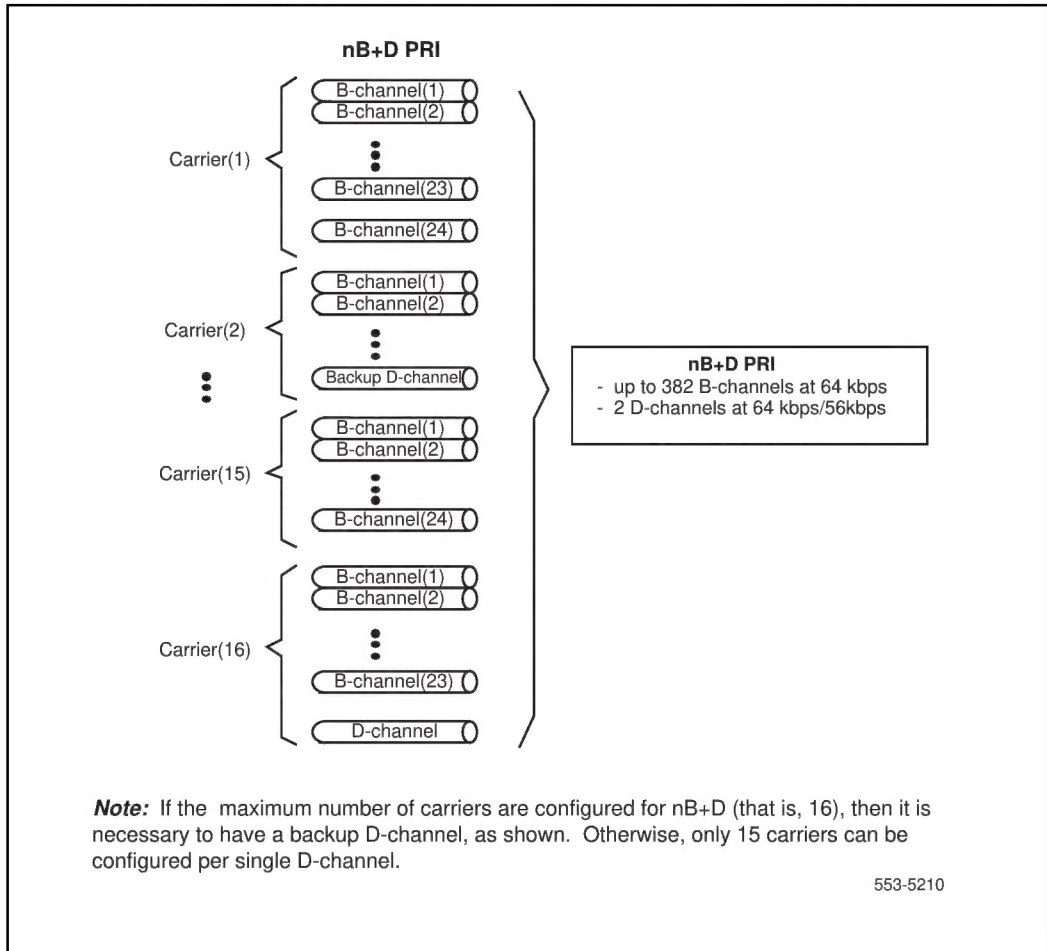
Refer to *ISDN Primary Rate Interface description and administration* (553-2901-100) for further explanation of the D-channel configuration.

PRI quick reference

The Primary Rate Interface (PRI) card provides a 24-channel digital trunk to another telephone switch.

With X11 release 15 and later, supporting nB+D capability, the D-channel interface must be configured as shown in Figure 1.

Figure 1
Meridian 1 system PRI capacity



553-5210

PRI commands (LD 60)

This is a quick reference list of important PRI commands. See Figure 2. For a more information on PRI commands, see “PRI fault clearing” on page 35.

PRI diagnostic commands are used to maintain both PRI and clock-controller operation. See Table 1 for a list of the PRI card and channel commands in Overlay 60. The commands are organized as follows:

- PRI card and channel commands
- Alarm and counter commands
- Test commands

Table 1
PRI card and channel commands in Overlay 60 (Part 1 of 3)

Command	Description
DISI L	PRI loop L is disabled only when all the channels are idle. The network and PRI cards are then disabled and status LEDs are lit. Channel status is set to busy. Enter END to abort.
DISL L	Disables network and PRI circuit packs of loop L. Active calls are automatically disconnected by on-hook simulation. All channels are disabled and status LEDs are lit.
DSCH L CH	All channels of loop L are disabled.
ENCH L CH	All channels of loop L are enabled.
ENLL L	Enables PRI loop L. Channel CH of PRI loop L is enabled. The channel is placed into the idle state and made available for calls.
STAT	Prints the status of all digital loops.

Table 1

PRI card and channel commands in Overlay 60 (Part 2 of 3)

Command	Description
STAT loop	Get status of digital loop. Sample output: AAA TRK LOOP x - BBBB SERVICE RESTORE: YES/NO YEL ALM PROCESS: YES/NO ALARM STATUS: NO ALARM/RED(local) ALARM Where: AAA may be: 1. DTI 2. DTI2 3. PRI 4. PRI2 5. TIE 6. DID 7. DTI LINK (DTI link loop = DLI) Where: BBBB may be: 1. DSBL = Hardware of specified digital loop is disabled 2. ENBL = Hardware of specified digital loop is enabled 3. RL BK = Hardware of specified digital loop is in remote loop back mode 4. DISI PENDING = DSI command is in progress 5. TRACKING = system clock is tracked to this loop 6. IDLE = Hardware of specified digital loop is idle When AAA = TIE, IDLE ISPC indicates that the channel is an established ISPC link ready to be used by any end-users having access to the associated ISPC route. 7. SERVER RCVY = server has not recovered status of DTI LINK loop. Channels will not be allocated for call processing until this status is removed by the server 8. BUSY = Hardware of specified digital loop is busy 9. MSBY = Hardware of specified digital loop is in make busy mode

Table 1
PRI card and channel commands in Overlay 60 (Part 3 of 3)

Command	Description
---------	-------------

Where: SERVICE RESTORE may be:

1. YES = restore service automatically if alarm is removed
2. NO = loop can only be manually enabled

Where: YEL ALARM PROCESS may be:

1. YES = yellow alarm processing is enabled
2. NO = yellow alarm processing is disabled

Where: ALARM STATUS may be:

1. NO ALARM = no alarm active
2. RED = red (local) alarm active

PRI alarm commands

See Table 2 for a list of PRI alarm commands and descriptions of these commands. These commands appear in Overlay 60.

Table 2
PRI alarm commands in Overlay 60 (Part 1 of 2)

Command	Description
CDSP	Clears the maintenance display on active CPU to 00 or blank.
CMIN C	Clears the minor alarm indicator for customer C.
CMIN ALL	Clears the minor alarm indicators for all customers.
LCNT	Prints content of all alarm counters of all PRI loops.
LCNT L	Prints content of all alarm counters of PRI loop L. The counters are: BPV Bipolar violation bit error rate counter. Indicates the number of times the loop has entered state due to excessive bipolar violations. FAP Number of times the loop has entered state due to excessive frame bit errors. SLP Frame slip repetition counter. The number of times the loop has entered state due to excessive frame slips. CRC Cyclic Redundancy Check (CRC) bit error rate counter. The number of times the loop has entered state due to CRC frame errors. G2 The number of times the loop has entered state due to excessive group 2 errors.

Table 2
PRI alarm commands in Overlay 60 (Part 2 of 2)

Command	Description
	TOTAL 24 HOUR BPV 24-hour bit error rate count
	TOTAL 24 HOUR FAP 24-hour frame bit error rate count
	TOTAL 24 HOUR SLP 24-hour slip count
	TOTAL 24 HOUR CRC 24-hour CRC error count
	TOTAL 24 HOUR G2 AIS 24-hour alarm indication signal count
	TOTAL 24 HOUR G2 LFAS 24-hour loss of frame alignment count
	TOTAL 24 HOUR G2 LMAS 24-hour loss of multiframe alignment count
	TOTAL 24 HOUR G2 RAI 24-hour remote alarm indication count
	TOTAL 24 HOUR G2 LOS 24-hour loss of signal count
RSET L CH	Resets the thresholds for PRI loop L, trunk channel CH.
RCNT	Resets all alarm counters of all PRI loops.
RCNT L	Resets all alarm counters of PRI loop L.

PRI test commands

See Table 3 for a list of the PRI test commands and a corresponding description of these commands. The PRI test commands are in Overlay 60.

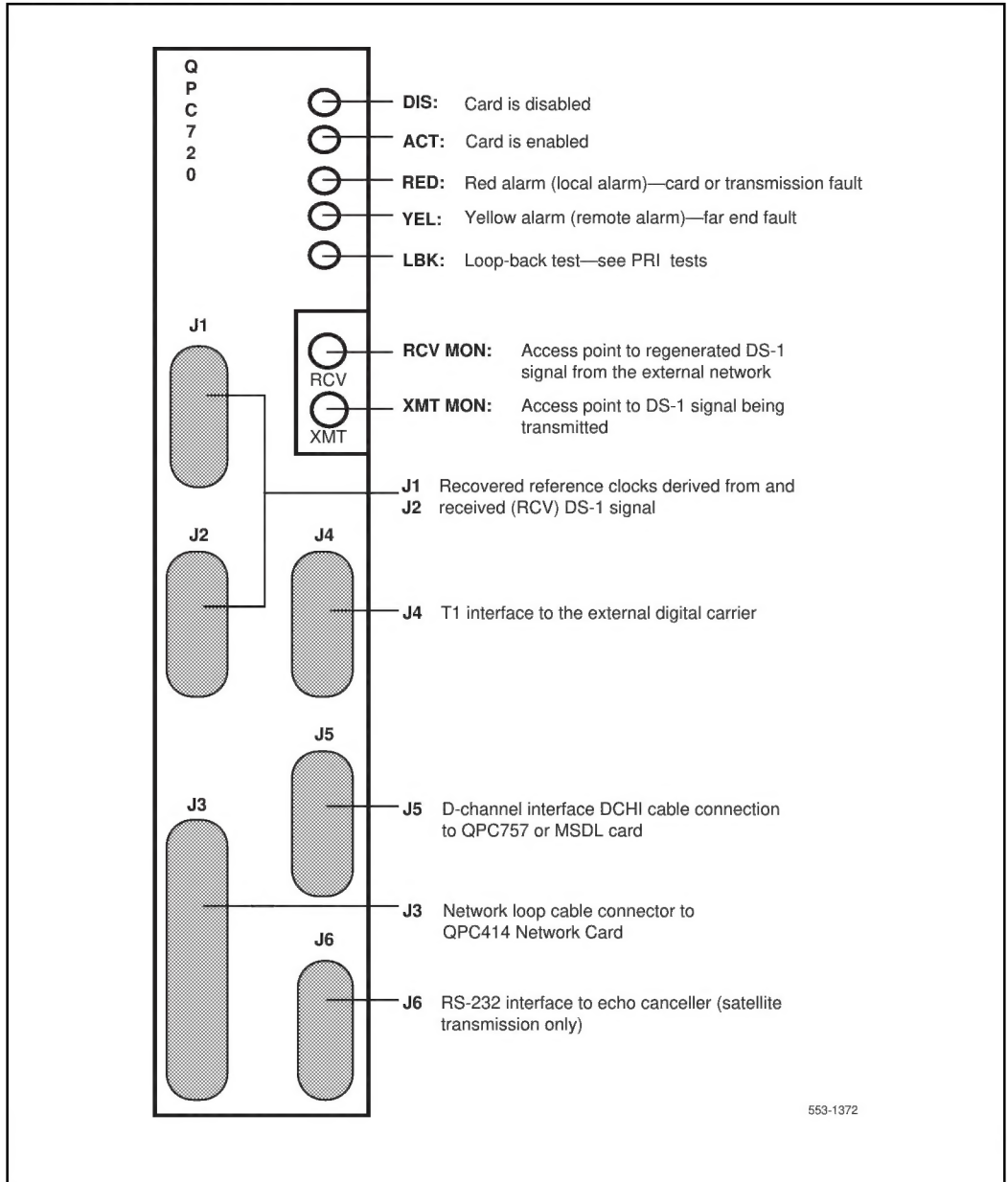
Table 3
PRI test commands in Overlay

Command	Description
ATLP (0) 1	Automatic loop test enable (= 1) or disable (= 0) default. 1 = Loop test enable; this will cause far end to raise and clear remote alarm. 0 = Run the partial loop test; there is no interaction for the far-end loop (default value).
SLFT L	Invokes PRI self-test on loop L. The loop must be disabled because the test disrupts call processing.
SLFT L CH	Invokes partial PRI hardware self-test using channel CH of loop L.
RLBK L	Closes the loop at the carrier interface point of the PRI so the far end can perform an external loop-back test. PRI loop L must be disabled because the test disrupts call processing.
DLBK L	Disables the remote loop-back test per RLBK L. The loop remains disabled.
DLBK L CH	Disables the remote loop-back test per RLBK L CH. The channel remains disabled.
RLBK L CH	Per RLBK L, but performed on channel CH. This channel must be disabled prior to issuing the request.
RMST L	Performs self-test on loop L, providing the far end is in the remote loop-back mode.
RMST L CH	Performs self-test on channel CH, providing the far end is in the remote loop-back mode.

PRI messages

PRI status and error conditions are reported with PRI messages. These messages are described at the end of this document and in the *X11 input/output guide* (553-3001-400).

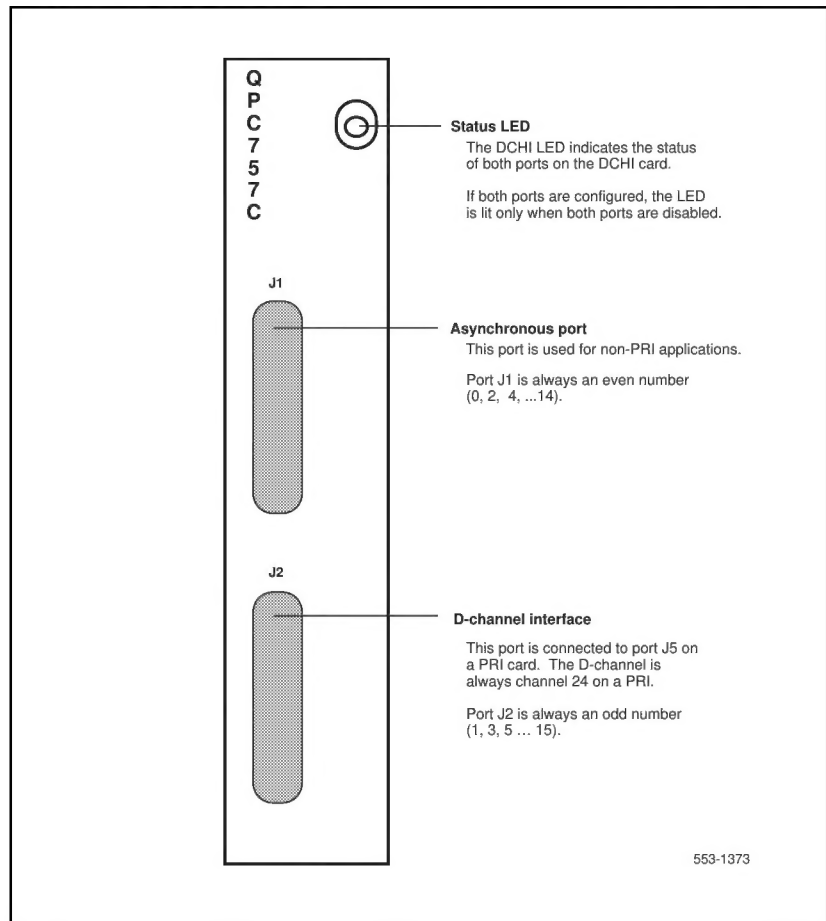
Figure 2
QPC720B PRI faceplate



DCHI quick reference

The D-channel Interface (DCHI) card provides an asynchronous port and the DCHI port. See Figure 3. The D-channel performs the call set-up and modification signaling for one or more 24-channel PRI cards. Switch settings for the DCHI port are provided in *ISDN Primary Rate Interface installation* (553-2901-200).

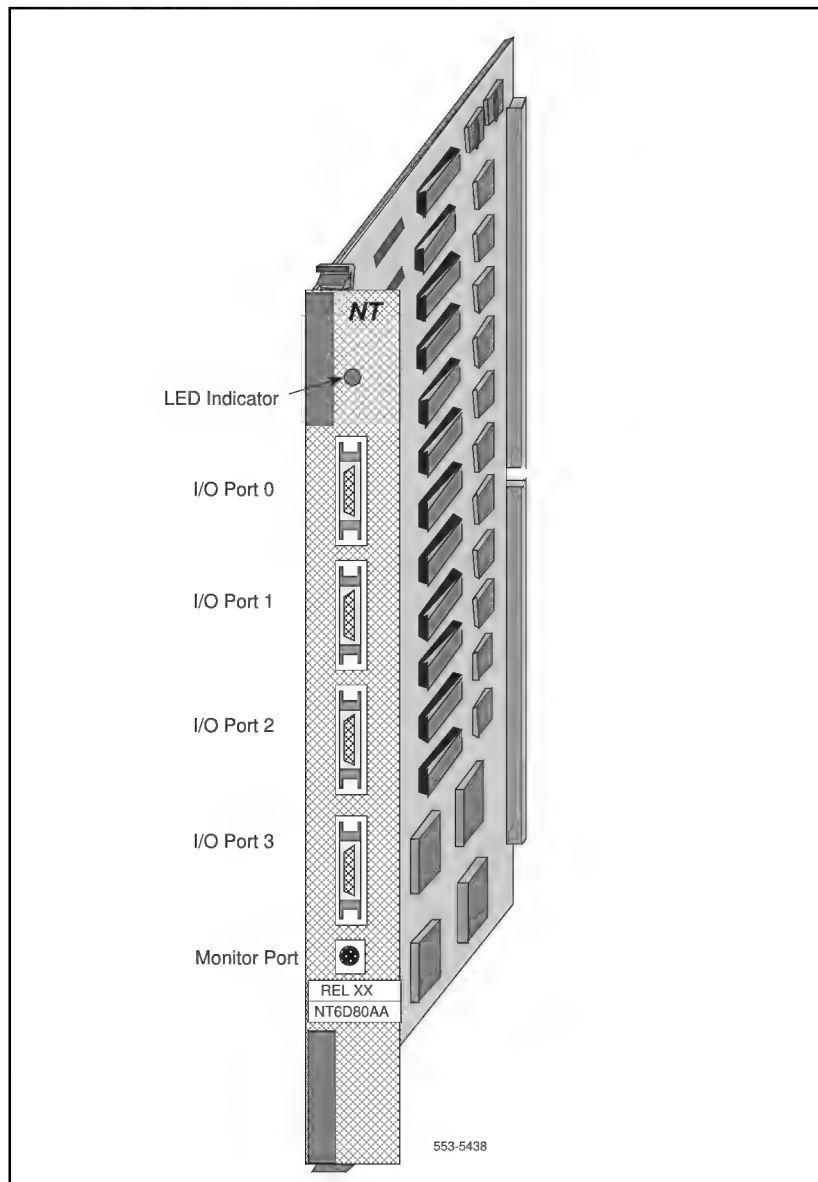
Figure 3
QPC757C DCHI faceplate



MSDL quick reference

The Multi-purpose Serial Data Link (MSDL) card provides four I/O ports in a single device. See Figure 4. Each port can be configured for asynchronous or synchronous interface, with switch settings for DTE or DCE for each port. Like the QPC757, the MSDL card performs call set-up and connections with the PRI QPC720 cards. Refer to *ISDN Primary Rate Interface installation* (553-2901-200) for information regarding the switch settings.

Figure 4
NT6D80 MSDL faceplate



D-channel commands (X11 release 17 and earlier)

This is a quick reference list of D-channel commands with X11 release 17 and earlier only. For a complete list of D-channel commands, refer to *X11 input/output guide* (553-3001-400).

Command	Action
DIS DCHI x	disable DCHI port x
ENL DCHI x	enable DCHI port x
EST DCH x	establish D-channel x
PLOG DCHI x	print D-channel statistics log x
RLS DCH x	release D-channel x
SDCH DCH x	Switch to back-up D-channel x
RST DCH x	reset D-channel x
STAT DCH (x)	print D-channel status (link status)
STAT DCHI (x)	print DCHI port status (hardware status)
TEST 100/101/200/201	see DCH tests

D-channel commands (X11 release 18 and later)

This is a quick reference list of D-channel commands for X11 release 18 and later. For a complete list of D-channel commands, refer to *X11 input/output guide* (553-3001-400).

Command	Action
DIS AUTO x	Disable automatic recovery for DCH x
DIS DCH x	Disable DCH x
ENL AUTO x	Enable automatic recovery for DCH x
ENL DCH x	Enable DCH x and attempt to establish the link
PLOG DCH x	Print error log on DCH x
RLS DCH x	Release D-channel x
RST DCH x	Reset D-channel x, inhibit signaling
SDCH DCH x	Switch to the standby D-channel x
STAT DCH (x)	Get status of one or all D-channels
TEST 100 x	Perform interrupt generation test on DCH x (QPC757 only)
TEST 101 x	Perform loopback mode test on DCH x (QPC757 only)
TEST 200 x	Perform interrupt handler test on DCH x (QPC757 only)
TEST 201 x	Test interrupt handler-to-link interface path (QPC757 only)

MSDL commands (X11 release 18 and later)

This is a quick reference list of D-channel commands for X11 release 18 and later. For a complete list of D-channel commands, refer to *X11 input/output guide* (553-3001-400).

Command	Action
DIS LLB x	Disable local loopback mode on MSDL DCH x
DIS RLB x	Disable remote loopback mode on MSDL DCH x
DIS TEST x	Disable TEST mode on MSDL DCH x
ENL LLB x	Enable local loopback mode on MSDL DCH x
ENL RLB x	Enable remote loopback mode on MSDL DCH x
ENL TEST x	Enable TEST mode on MSDL DCH x
PCON DCH x	Print configuration parameters on MSDL DCH x
PTRF DCH x	Print traffic report on MSDL DCH x
TEST LLB x	Start local loopback test on MSDL DCH x
TEST RLB x	Start remote loopback test on MSDL DCH x

D-channel messages

D-channel status and error conditions are reported DCH messages. These messages are described at the end of this document and the *X11 input/output guide* (553-3001-400).

Maintenance service messages

Service messages provide near and far end switch status. Both service and service acknowledge messages are supported on PRI B-channels and ISL channels. In addition, service and service acknowledge messages for D-channels are supported between Meridian 1 and Meridian 1 only. These messages are used for backup D-channel and D-channel sanity polling. The status may be in-service and out-of-service.

Service and service acknowledge messages for B-channels and ISL channels are supported between the following:

- Meridian 1 to Meridian 1

Service and service acknowledge messages for B-channels and PRI only are supported between the following:

- Meridian 1 to DMS-100
- Meridian 1 to DMS-250
- Meridian 1 to AT&T 4ESS and 5ESS

The following are the three channel statuses reported by the service and service acknowledge messages for B-channels and ISL channels:

- in-service
- maintenance
- out-of-service

Near end and far end subcategories are defined for each maintenance status. See Table 4 for possible combinations of near and far end status and the channel capability for each status. When the near end status and far end status do not match, the more severe maintenance status takes effect over the less severe maintenance status.

Table 4
Maintenance message status

Near end status	Far end status	B or ISL channel capability for near end
In-service	In-service	both incoming and outgoing calls allowed
In-service	Maintenance	only incoming calls allowed
In-service	Out-of-service	not allowed to use
Maintenance	n/a	not allowed to use
Out-of-service	n/a	not allowed to use

Service message function

Service messages are used to monitor the following:

- D-channel establishment
- D-channel sanity polling
- B-channel or ISL channel status change
- Channel status audit

D-channel establishment

When the D-channel establishes, the B-channel status is supported by sending service messages for each B-channel controlled by a D-channel. This allows the far end to synchronize its channel states. These service messages are sent when the D-channel is brought up automatically by the system or manually by using LD 96.

This function is supported by Meridian 1 to Meridian 1 connections only.

D-channel sanity polling

If a D-channel has been idle for 30 seconds, a service message is sent to poll the sanity of the link. The service message is sent regardless of whether the near end is configured as a master or a slave.

B-channel or ISL channel status change

Whenever there is a status change for a B-channel or an ISL channel, the new status is reported to the far end by means of a service message. Status change can occur through service change or maintenance operations, such as the addition or deletion of a channel in LD 14 or the enabling or disabling of the associated loop, shelf, card or unit in LD 30, LD 32, LD 36, LD 41, or LD 60.

Channel status audit

LD 30 is enhanced to allow channel status audit to be initiated. The channels associated with each D-channel are examined and their status is reported to the far end by means of service messages.

Service message commands

You activate the service messages in LD 96 on a per D-channel basis. These are the commands:

- ENL SERV x: Turns on the support of service and service acknowledge messages for D-channel x. The primary and backup D-channels must be disabled before enabling service messages.
- DIS SERV x: Turns off the support of service and service acknowledge messages for D-channel x.
- STAT SERV (x): Displays the current service and service acknowledge message SERV setting for individual DCH n or for all D-channels.

When configuring these messages, the SERV command should only be enabled if both switches are equipped with X11 release 15 software.

Note: The ENL SERV and DIS SERV commands apply to both the primary and backup D-channel. With backup D-channel configured, for example LD 17 DCHI = 5 and LD 17 BCHI = 7, ENL SERV 5 enables both D-channels 5 and 7. Similarly, DIS SERV 5 disables both channels.

Two new statuses are added in X11 release 15 for maintenance messages, FE MBSY, Far end maintenance, and FE DSBL, Far end disabled. The FE MBSY, FE DSBL, and IDLE messages appear when either the B-channel or the ISL channel is idle. See “PRI fault clearing” on page 35 for more information about these responses.

PRI status check

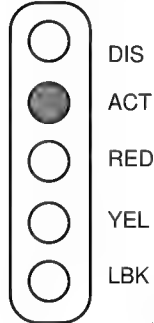
This status check is used to verify that a PRI is working normally. It assumes the PRI and DCHI/MSDL are properly installed (for example, correctly cabled) and operational. If the PRI status is not as shown in the steps below, complete the check and proceed to PRI fault clearing procedures.

Once all problems are cleared, go to PRI start-up.

Procedure 1 PRI status check

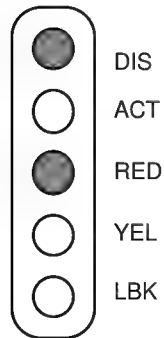
- 1 Check the status LEDs on all PRI cards.

For normal operation, only the green ACT LED is lit. Note if any other LED is lit and continue with the status check



1340

- 2 Check the LED on the DCHI or MSDL faceplate.



1340

If the LED is lit, the D-channel is disabled.

Note: The DCHI LED indicates the status of both ports on the DCHI card. If both ports are configured, the LED is lit only when both ports are disabled.

Check the status of the DCH port using the following:

LD 96

STAT DCH (x)

- 3 Check the status of all PRI cards using the following:

LD 60

STAT (loop)

sample response:

PRI TRK LOOP L: ENBL
SERVICE RESTORE: YES
YELLOW ALARM PROCESS: YES
ALARM STATUS: NO ALARM
CH 1 IDLE DID
CH 2 BUSY TIE
.
.
CH 24 D-channel

- 4** List PRI alarm counters using the following:

LD 60

LCNT (loop)

(Check the out-of-service counters to determine the number of out-of-service occurrences since last execution of the midnight routines.)

response:

BVP xxxx

SLIPR xxxx

CRC xxxx

LOSFA xxxx

OS_BVP xxxx

OS_LOSF xxxx

OS_YEL xxxx

- 5** Check DCHI or MSDL card and D-channel (DCH) link status using the following:

LD 96

STAT DCH (x)

(x is the I/O port number)

the D-channel status should be

OPER (operational)

the DCH status should be

EST (established)

- 6** Check to ensure the following PRI cables are connected correctly:

— PRI to DCHI or MSDL cable

— T1 cable from QPC720B to DSX (the digital cross connect)

PRI start-up

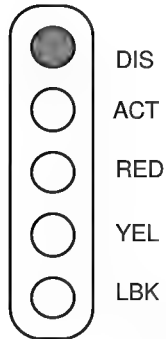
This procedure shows how to take the PRI and DCH from disabled to operational.

Procedure 2 PRI start-up

- 1 Check the status of all PRI cards.

The PRI shown is disabled.

If any other LEDs are lit, go to PRI fault clearing.



1340

- 2 Test all PRI cards using the following:

LD 60

DISL loop

SLFT loop

response:

SLFT OK

- 3** Enable all PRI cards using the following:
LD 60
ENLL loop
response:
PRI000 Correct version ID
DTA005 yellow alarm (remote alarm)
DTA007 yellow alarm cleared (provided the far end is up)
DTA023 PRI loop is up
DCH1010 D-channel is disabled
- 4** Enable the D-channel(s) using the following:
LD 96
ENL DCH x
(x is the I/O port number)
response:
DCH x EST Time and Date
D-channel is established (provided far end D-channel is OK).
If you do not get the DCH EST response, see the note in step 5.
- 5** Perform a PRI status check.
Note: If the status check response is RLS, establish the link at this point by entering the following command:
EST DCH x

Network Call Trace

Network Call Trace is available with X11 release 17 and later to trace a network call and to diagnose network problems. When a network call is blocked, trace data is output indicating the reason the call was blocked and the X11 software procedure responsible.

A network call can be traced by dialing a SPRE code and the NCT feature code (9912) before the network number. When this is done, call set-up and status information is output to the system terminal as the call tandems through the network. The trace information is output to all the system terminals designated in LD 17 as ADAN = TTY and USER = MTC.

NCT provides useful information such as the following:

- the route used
- the facility accessed
- the routing control imposed
- the call-blocked location

Enhanced Trace command output

With X11 Release 19 and later, a time stamp is added to the call trace output. This time stamp appears on the first line of the output.

The TN or digital trunk prints out only when there has been a change to the call register. The TN or trunk is printed only once.

Sample time stamp output which will appear on the first line:

```
.14:00:02 12/25/1992
```

There are two Network Call Trace functions: 01 and 02. They output different information as shown in the following sections.

Configuring Network Call Trace

To configure Network Call Trace on the Meridian 1, log in to the system and do the following:

- enter NCT in response to prompt RCAP in LD 17 for each D-channel (only required when the remote end is Meridian 1 with X11 release 17)
- enter CLTA in response to prompt CLS in LD 10 or LD 11 to allow a telephone to trace calls

Tracing a call

A call can be traced from any attendant console or a telephone with CLTA class of service (CLS). To trace a call dial the following:

SPRE + 9912 + xx + yyy...

where

SPRE = special function access code (defined in LD 15)

9912 = NCT feature code

xx = call trace function (01, 02)

Dial tone is provided after “xx” is dialed.

yyy... = digits normally dialed for the network call

Trace function 01

This function provides the common information related to ESN routing. It is the recommended function. The following is the call trace data for function 01:

```
**** NCT xx ****  
<switch specific data>  
--- OUT ---  
<outgoing data>  
--- IN ---  
<incoming data>  
--- STATE ---  
<call state>
```

Where xx is the call trace ID for a traced call. The output data depends on the type of call and can be the following:

CAUSE xxxx—call reject cause
CREF xxxx—call reference number
DCH—D-channel number
DGT xxxxx...—outgoing: digits outpulsed
DGT xxxxx...—state: digits received (NODE=TBD), or
digits dialed when the call is rejected (STAT=REJ)
DN xxx—DN of ringing set
ENT xx—entry in the outgoing route list
FCI x—free calling area index
FRL x—facility restriction level

IFC xxx—outgoing D-channel interface (LD 17 prompt IFC)
D100 = Meridian DMS-100
D250 = Meridian DMS-250
ESS4 = AT&T ESS4
ESS5 = AT&T ESS5
SL1 = Meridian SL-1
S100 = Meridian SL-100
SS12 = Norwegian SYS-12
AXEA = AXE-10 (Australia)
UNKN = unknown data received
LOC xxxx—call reject software location
MODE xxx—outgoing termination
ALOG = analog trunk
DTI = digital trunk interface–1.5 Mb/s
DTI2 = digital trunk interface–2.0 Mb/s
ISL = ISDN Signaling Link
PRI = Primary Rate Interface
UNKN = unknown data received
NCOS xx—Network class of service
NODE xxxx—type of node
ORIG = originating node
TAND = intermediate node (tandem)
TERM = terminating node
TBD = node undetermined
RLI xxx—ESN outgoing route list index
RLS xx xx—software release, issue number of node switch
RTE xxx—incoming or outgoing route number

SID xxxx—system identification (LD 17)
STAT xxxx—call state, where xxxx can be
 ANS = call answered
 BUSY = termination busy
 DIAL = call state is dialing (mainpm)
 ERR = error detected in this message
 OPULSE = digit outpulsing
 PROC = call proceeding through this node (tandem)
 REJ = call rejected or blocked
 REOR = call state is dialing (mainpm)
 RING = call ringing
 SEIZ = trunk seized

STYP xx—terminating station type
 500 = single line telephone (LD 10)
 BCS = multi-line telephone (LD 11)
 ATT = attendant console (LD 12)

TKTP TIE,COT,WAT...—incoming or outgoing trunk type
TKTN loop ch, l s c u—incoming or outgoing B-channel, ISL trunk TN
TN l s c u
TN of originating telephone
TOD x—time of day schedule
TYP I,E —Initial/Extended set
XLT NPA,NXX,LOC...—ESN translation type

Example 1: Successful call with trace function 01

In this example, the following digits are dialed from a telephone at TN 0 0 5 1.

1+9912++01+78+6000

where,

1 = SPRE (defined in LD 15)
9912 = NCT feature code
01 = call trace function 01
78 = PRI route access code (ACOD)
6000 = remote extension

The resulting trace information is output on the maintenance terminal:

**** NCT # 22 ****

NODE ORIG (SL1)

SID 0

RLS 17 53

--- OUT ---

TNS 0 0 5 1

DCH 5

IFC SL1

CREF 22

MODE PRI

RTE 24

TKTP TIE

TKTN 18 22

DGT 6000

--- STATE ---

STAT PROC

**** NCT # 22 ****

NODE ORIG (SL1)

SID 0

RLS 17 53

--- OUT ---

DCH 5

RTE 24

TKTP TIE

TKTN 18 22

DGT 6000

--- STATE ---

STYP BCS

DN 6000

STAT RING

Example 2: Unsuccessful call with trace function 01

In this example, the same call is made as in example 1, but in this case the D-channel is down.

The resulting trace information is output on the maintenance terminal:

```
**** NCT # 22 ****  
NODE ORIG (SL1)  
SID 0  
RLS 17 53  
--- OUT ---  
TNS 0 0 5 1  
MODE UNKN  
--- STATE ---  
DGT 786000  
STAT REJ  
LOC 99
```

Trace function 02

Call trace function 02 provides the information from the active (main) call register, the incoming call state, and the outgoing call state (if any). Trace function 02 is intended as a debugging tool for system designers.

The information output by function 02 includes the following:

NODE ORIG,TAND,TERM,TBD
SID xxxx—system identifier
RLS xx xx—release of software, issue number of node
TNS l s c u—TN of the originating set
CREF xxxx—call reference number

Incoming call:

ISTATPM x—incoming state progress mark
ITRKPM x—incoming trunk progress mark
LOC xxxx—call reject software location

Outgoing call:

OSTATPM x—outgoing state progress mark
OTRKPM x—outgoing trunk progress mark
LOC xxxx—call reject software location

Main call register:

Word 0—MainPM/AuxPM
Word 1—CRlink
Word 2—Queue_In
Word 3,4—Son_Types/Processes
Word 5—Aux_CRlink
Word 6—OrigType/TerType
Word 7—TTR_TN
Word 8—OrigTN
Word 9—TerTN
Word 10—CallFwdTN
Word 11—DISA_Call/XFER_indication
Word 12,13—CR_Dialed_DN
Word 14—Digitload/Digitunload
Word 15-20—digits

Feature requirements

Network Call Trace is limited to basic ISDN PRI/ISL calls across Meridian 1 private networks.

NCT collects information only during initial call setup. It does not report on further call modification, such as Call Transfer.

Network call information is lost and the call trace ceases when any of the Meridian 1 nodes in which the call is being traced is initialized or any of the D-channels fails.

Although NCT requires PRI or ISL, calls can be traced to nodes that do not support Network Call Trace. Calls can also be traced to DTI or analog trunks. However, only the local node information is provided. These are the trunk types that are not supported: ADM, AWU, DIC, MDM, MUS, PAG, RAN, RLM, and RLR.

Call trace information is still output if the call is blocked before the trunk is seized. If queuing (Ring Again, CBQ or OHQ) is available, then the original call trace function is activated when the call is offered to the user.

When a remote Meridian 1 without NCT capability receives a Call Trace message, no call trace information is returned.